

ABSTRACT

A rotor (3) is provided with slits (22, 24, 26, 28), each of which serves as a flux barrier blocking a magnetic flux. A direction shown by an arrow is a forward direction
5 along which the rotor rotates when a vehicle moves forward. Each of the slits has a width tapering down from a trailing position toward a leading position with respect to the forward direction. The rotation in a reverse direction opposite to the forward direction shown by the arrow causes larger magnetic flux linkage than the rotation in the forward direction, and hence generates high torque and high counterelectromotive force.
10 Therefore, in the reverse direction, the rotor cannot serve as a motor to produce an output unless high voltage is applied thereto. Accordingly, the torque generated in the reverse direction is used for regenerative operation. It is thereby possible to provide a vehicle drive system capable of exhibiting performance in a well-balanced manner between power running and regenerative operation, and a vehicle provided with the
15 same.